WHAT IS CLAIMED:

1. A vibration damper for a machinery mount having a top member, and a bottom member disposed below and spaced from the top member and adaptable to be positioned on a substructure, comprising:

(a) a receptacle closed at the bottom and open at the top for vertical disposition on the bottom member so as to have opposed parallel walls as viewed in cross-section, and having a top marginal edge spaced from the top member, thereby defining a chamber adaptable for containing a viscous medium;

(b) a plunger depending downwardly from the top member for vertical disposition partially within said receptacle and concentric therewith; said plunger having opposed parallel walls as viewed in vertical cross-section, and of the same configuration as said receptacle when viewed in plan, thereby defining a circumferential channel with the walls of the receptacle in which the viscous medium is free to flow, said plunger being spaced from said closed bottom of said receptacle so as to be submerged partially in the viscous medium contained in said chamber, and to be free to reciprocate vertically with reference to said receptacle; and

(c) a transversely disposed plate member affixed at about the bottom of said plunger, said plate member having a plurality of apertures to provide fluid communication between said receptacle and said plunger, whereby reciprocation of said plunger allows said viscous medium to pass through said apertures and allows movement of said viscous medium in said

circumferential channel between the walls of the receptacle and plunger.

2. A vibration damper according to claim 1 further including a rim depending downwardly from the top member, said rim being spaced from the top marginal edge of said receptacle and approximately coinciding therewith so as to define a gap, and sealing means encompassing said gap.

3. A vibration damper according to claim 2 wherein said sealing means surrounding said gap is a bellows.

4. A vibration damper according to claim 1 further including one or more strengthening members disposed within said plunger and between said top member and said plate and affixed thereto, said plunger and said strengthening members having an opening at a location above the viscous medium to allow for the circulation of air.

5. A vibration damper according to claim 2 further including one or more strengthening members disposed within said plunger and between said top member and said plate and affixed thereto, said plunger and said strengthening members having an opening at a location above the viscous medium to allow for the circulation of air.

6. A vibration damper according to claim 3 further including one or more strengthening members disposed within said plunger and between said top member and said plate and affixed thereto, said plunger and said strengthening members having an opening at a location above the viscous medium to allow for the circulation of air.

7. A vibration damper according to claim 4 wherein said receptacle and said plunger are cylindrical, and further including a first substantially cylindrical tube downwardly depending from said top member and spaced between said receptacle and said plunger, a second substantially cylindrical tube spaced between said first cylindrical tube and said plunger and extending upwardly from said bottom member, said second cylindrical tube having an opening at about the level of said viscous medium thereby maintaining an equal level of viscous medium, said first and second cylindrical tubes of the same configuration of said receptacle and said plunger when viewed in plan.

8. A vibration damper according to claim 5 wherein said receptacle and said plunger are cylindrical, and further including a first substantially cylindrical tube downwardly depending from said top member and spaced between said receptacle and said plunger, a second substantially cylindrical tube spaced between said first cylindrical tube and said plunger and extending upwardly from said bottom member, said second cylindrical tube having an opening at about the level of said viscous medium thereby maintaining an equal level of viscous medium, said first and second cylindrical tubes of the same configuration of said receptacle and said plunger when viewed in plan.

9. A vibration damper according to claim 6 wherein said receptacle and said plunger are cylindrical, and further including a first substantially cylindrical tube downwardly

depending from said top member and spaced between said receptacle and said plunger, a second substantially cylindrical tube spaced between said first cylindrical tube and said plunger and extending upwardly from said bottom member, said second cylindrical tube having an opening at about the level of said viscous medium thereby maintaining an equal level of viscous medium, said first and second cylindrical tubes of the same configuration of said receptacle and said plunger when viewed in plan.

10. A vibration damper according to claim 1 and further including a plurality of compression springs extending between the top member and the bottom member and arranged exterior to the receptacle.

11. A vibration damper according to claim 6 wherein said springs are arranged adjacent the receptacle.

12. A vibration damper according to claim 1 wherein said plate member has an open area ranging from about 35% to 65% to the total area of the plate.

13. A vibration damper according to claim 1 or claim 8 wherein the plate member has a thickness ranging from about 0.06 inch to 1.0 inch.

14. A vibration damper according to claim 1 wherein said plate member is comprised of two or more identical plates that are stacked and the apertures for the plates are aligned.

15. A vibration damper according to claim 4 wherein said receptacle and said plunger are rectangular.

16. A vibration damper according to claim 4 wherein said

receptacle and said plunger are cylindrical, and further including an annular rim depending downwardly from the top member, said annular rim being spaced from the top marginal edge of said receptacle and about coinciding therewith so as to define a gap.

17. A vibration damper according to claim 4 wherein said receptacle and said plunger are cylindrical, and further including one or more cylindrical strengthening members disposed within said plunger and between said top member and said plate and affixed thereto, said plunger and said strengthening members having an opening at a location above the viscous medium to allow for the circulation of air.

18. A vibration damper according to claim 1 wherein the opposed parallel walls of the plunger have a top marginal edge that is spaced from the top member.

19. A vibration damper for a machinery mount having a top member, and a bottom member disposed below and spaced from the top member and adaptable to be positioned on a substructure, comprising:

(a) a receptacle closed at the bottom and open at the top with a vertical side wall and having a top marginal edge spaced from the top member, thereby defining a chamber for containing a viscous medium;

(b) a plunger depending downwardly from the top member for vertical disposition partially within said receptacle and concentric therewith; said plunger having a vertical side wall the same configuration as said receptacle so as to form a

circumferential channel with the receptacle side wall in which the viscous medium is free to flow, the plunger side wall having a top marginal edge spaced from the top member, said plunger being spaced from said closed bottom of said receptacle so as to be submerged partially in the viscous medium contained in said chamber, and to be free to reciprocate vertically with reference to said receptacle; and

(c) a transversely disposed plate member affixed at about the bottom of said plunger, said plate member having a plurality of apertures to provide fluid communication between said receptacle and said plunger, and defining with the plunger side wall an interior of said plunger whereby reciprocation of the plunger in one direction or the other will allow said viscous medium to pass through said apertures and will allow movement of said viscous medium in said circumferential channel between the walls of the receptacle and plunger and over the top marginal edge of the plunger side wall into the interior of the plunger.

20. A vibration damper according to claim 15 further including a rim depending downwardly from the top member, said rim being spaced from the top marginal edge of said receptacle and approximately coinciding therewith so as to define a gap, and sealing means encompassing said gap.

21. A vibration damper according to claims 15, further including one or more baffles disposed within said plunger between said top member and said plate and affixed thereto, said plunger and each baffle having an opening to allow the viscous medium to flow therethrough upon reciprocation of the plunger.